Water Quality Standards Advisory Committee
Meeting Minutes
NH Department of Environmental Services
February 26, 2008

Members Present:

William Beckwith (By Telephone)	US Environmental Protection Agency
Wendell Berry	NH Lakes Association
Philip H. Bilodeau	NH Water Works Association
Malcolm Butler	NH Water Council
Donna Hanscom (By Telephone)	City of Keene
Vernon Lang	US Fish and Wildlife Service
Allan Palmer	RMAC
Carl Paulsen	NH Rivers Council
William Schroeder	Canobie Lake Protective Association & NH Lakes Association

Others Present:

Neil Cheseldine	Wright-Pierce
William Daly	Town of Salem, DPW
Jeff Deacon	USGS
Jim Fitch	Woodard & Curran
Mike Metcalf	Underwood Engineers, Inc., Representing the Town of Durham
Jonathan Sistare	Town of Salem

DES Staff Present:

Jeff Andrews	NHDES Wastewater Engineering Bureau
Paul Currier	Watershed Management Bureau, Administrator
Dan Dudley	NHDES Wastewater Engineering Bureau
Bob Estabrook	NHDES Watershed Management Bureau
Lisa Fortier	NH DES Watershed Management Bureau, Executive Secretary
Carolyn Guerdet	NH DES Water Division, Administrative Assistant
Gretchen Hamel	NH DES Administrative Legal Unit
Jillian McCarthy	NHDES Watershed Management Bureau
Paul Piszczek	NHDES Watershed Management Bureau
Michael Walls	NHDES Office of Commissioner
Susan Willoughby	NHDES Wastewater Engineering Bureau

1:30 – 1:35 Introductions — Carl Paulsen

Introductions were done around the room. Bill Beckwith with EPA and Donna Hanscom from the City of Keene joined the meeting on the phone. Paul Currier asked everyone to speak up when they spoke so they could hear. Previously Bud Berry was the representative of the NH Lakes Association and Bill Schroeder was his alternate. Bud is now representing the LMAC and Bill Schroeder is the official representative for the NH Lakes Association.

1:35 – 1:45 Approval of 1/22/2008 meeting minutes — Carl Paulsen

- Motion to approve the January 22, 2007 meeting minutes was called for by **Carl Paulsen**. It was brought forward by **Mike Butler** and seconded by **Allan Palmer**.

Carl Paulsen – Are there any changes?
Allan Palmer – I had one change Carl, on page 3, when we are talking about what toxics numbers ended up in the interim final rules you are quoted in here as saying that you went back to the old numbers and took them out. Is that a correct statement?

Bob Estabrook – We went back to the old toxic numbers. We had made changes to agree with the new recommended EPA numbers and we went back to the old numbers. I think I meant that we took out the revised ones so we are back with the old numbers.
Allan Palmer – That, as it is written, is misleading.
Bob Estabrook – Yes, we can change that.
Paul – Just take out the words, "and took them out"?
Bob – Yes.
Carl Paulsen – Anything else with the minutes?

- **Carl Paulsen** asked for a vote to approve the minutes of January 22, 2008. **All approved and none opposed.**

Carl – I think we can move on to Bob and the rule adoption process.

1:35 - 1:45 Update on rule adoption process and upcoming public hearing
Bob Estabrook

The water quality rules are in progress. We filed the rulemaking notice on February 8th and it was published on February 15th. The hearing is scheduled for March 14, 2008 in the DES auditorium from 9 a.m. to 11 p.m. We will be taking comments at the hearing and for a period of ten days after the hearing. The goal is to have the new rules adopted by June 10th. Are there any questions?
Donna Hanscom – Bob, are those the rules that you sent out with these other things that we received for this meeting?
Bob Estabrook – No, these are the rules discussed earlier that had minor changes. Now we are in the process of discussing the changes to the nutrients and these other issues. We actually won't be proposing new rules until after June.
Paul Currier – Does that answer the question Donna?
Donna Hanscom – It does. That is what I thought, but I wanted to clarify that.
Carl Paulsen – Is there anything else? Paul, you were going to talk about the rulemaking process?
Paul – Yes, but Gretchen is the expert at this and if I stumble she can jump in.

1:45 – 1:55 Rulemaking process diagram discussion **Paul Currier**

What you have in your packet and what you see here is the official process diagram from the Administrative Services Website for rulemaking. This was asked for by people at the last meeting where I verbalized the process and people asked if I had something that would give a better explanation of what is going on. Pre-process stuff is before official rule making starts. When we are ready to propose the rules we go to the Legislative Budget Assistant and get a Fiscal Impact Statement. The initial proposal must be final at that point. We file the rulemaking notice and it gets published in the register as Bob just described. The current rulemaking has been published in the register. When it is published the hearing date has to be announced and that is the hearing date that Bob just told you about. We receive comments at the hearing and written comments after the hearing, then we change our initial proposal, based on the comments we receive at the hearing and any internal comments that we have collected, and we file a final proposal. We go through the same process with the Legislative Budget Assistant (LBA). If the fiscal impact has changed then we report that in our Fiscal Impact Statement and the LBA makes a new analysis. That is filed with Legislative Services and the Joint Legislative Committee on Administrative Rules (JLCAR), which is an official committee of the legislature, begins their process. The committee reviews it and holds a hearing. They can file objections, approve conditionally, or approve it. In general, there are always preliminary objections. The agency

responds by revising the draft rule and then the agency can only make changes to the draft rule in response to the objections from the Committee.
Gretchen Hamel – Just to clarify, the hearing that JLCAR has is a regularly scheduled meeting and the rule is an item on their agenda. They don't have the hearing one day and vote on a different day. It is all done at the same time. Lately we haven't been getting very many preliminary objections, which is nice, and that is mainly because we have been getting comments from the attorneys at the Office of Legislative Services before we have to file a final proposal and so we are able to address the concerns that would otherwise be identified to the committee. We also have the ability if there is something we have overlooked, or we get the OLS comments after we file to request what is called a conditional approval, which lets us ask the Committee to approve the rules as amended. We have to give them the exact language that we want to use and they can do that and it is a much shorter process in terms of turnaround than being a preliminary objection and having to respond to that and go back to that Committee. There are a couple of other options and quirks in that process now that never used to be there.
Paul Currier – That can be streamlined so we can only have one hearing or meeting in which the rules are held in front of JLCAR. There are various processes by which the Committee and their legal staff review the rules and give comments to the agency, DES, and we respond. The final JLCAR action can either be an approval, final objection, or a vote to sponsor a joint resolution to the Legislature. The joint resolution is very, very rare. It is either approval or final objection. The agency can adopt a rule, even with a final objection. The effect of a final objection is that the presumption of legality and force of law for the rules is not there if there is a final objection. The burden is on agency to demonstrate legality in the case of an appeal if there is a final objection.
Carl Paulsen – I have one question on the process. If there is a preliminary objection and there is another meeting by JLCAR, do they take public comment at that point?
Gretchen Hamel – Typically they won't. They will take public comment at the first JLCAR. Sometimes there are extraordinary circumstances and there are a lot of people who have a lot to say. When we readopted the Septage Management Rules there was quite a crowd and the Committee tried to limit the comment at the second JLCAR but wasn't largely successful in trying that. Most of the time there is only public comment at the first one and the issue at the second one is did we adequately address the objections.
Carl Paulsen – Any other questions?
Jeff Deacon – I had a question on process. What you are moving forward at this time is a version of Chapter 1700, which is pretty much the same as it was before. You, in a previous meeting, laid out a bunch of questions or topics that we are going to be working on as a committee over the next six months or longer, which would result in revisions to rules. Would you bundle them all into a package of revisions and go through the process again in the future?
Paul Currier– That is the intent. We did some work a few years ago with the idea of bundling and we never moved any of those through to rulemaking process. The intent is to bundle and institute new rule making in late 2008, depending on rule language progress.
Carl Paulsen – Would the hope be to address all issues by late 2008?
Paul Currier – Yes, that is the scenario at this point.
Carl Paulsen – Are there any other questions? Paul, I guess you are on. This is a separate issue, the process for documenting the rules.
Paul – Yes.

1:55 – 2:05 Process for documenting draft rule revisions Paul Currier

We are finished talking about the rulemaking that is currently going on with the Office of Legislative Services and the Joint Legislative Committee on Administrative Rules and we are moving to discussions on the next set of rules. The ones we are working on to go through this official rulemaking process before the end of 2008. In your meeting package was a new

working draft. The idea is that before every meeting of the Committee you will get a new draft with two forms of annotation in it to keep track of what the Committee and DES has done on the rules and to record comments. There are three color codes now and I think that is all we need. I think that will change as we make progress. Changes that haven't been talked about by the Advisory Committee or have been talked about and the discussions were not finished are in yellow. Changes that have been reviewed by the Committee, talked about and are finished are in blue. That indicates how DES intends to proceed with the rule based on our discussions with the committee. Green is the specific parts of the rule that are on the agenda to be discussed at the current meeting. The annotations in the text themselves are identical to the format for rulemaking. Additions are in bold and deletions are in strike-out. We have assumed, and we have incorporated and you don't see them anymore, all of the housekeeping changes that are in the current rulemaking before JLCAR. For example, in this document everything says Env-Wq, which was a change that was in the rulemaking that is before JLCAR. There are some other fairly minor changes to text and so on. Those are all in this draft as if they have already been approved by JLCAR and adopted by the agency. That is basically to avoid confusion in trying to keep track of too many changes all at once. We propose to keep track of comments and discussion is by using a comment box type of process. We will keep a file, in addition to minutes of these meetings, of comments received. There is a letter from Bill Beckwith we received with EPA's review of the last draft and records of our internal meetings at DES that will result in some changes. In your meeting packet there is a letter from NH Lakes and we will talk about it. In the annotated version, we will put in a comment box that summarizes the pertinent comment at an appropriate place in the rule. It documents when we have done something about it. I am going to move down to where this comment box appears in the annotated rule, not too far down, to show you how it works. Bill Beckwith had commented on the wetlands definition. I won't read the comment but what you can see is that it is documented that I worked on it the 21st and I responded on the 21st and the response is down here. You will see the revisions to the definition in yellow because this is the first time you have seen them and the committee has not acted upon them. That is how this process is intended to work and our intent is to keep up with this as it goes and provide the committee with a new draft before each meeting so you can see where we are at. Are there any questions on that?

James Fitch – Can we get the minutes sooner in the future to get these minutes earlier to review?

Paul Currier – We will do our best at that.

Allan Palmer – Are we going to discuss the wetlands definition later on or are we green on that?

Paul Currier – It is not green. If it is yellow it means it hasn't been discussed and we are not going to talk about it at this meeting.

Allan Palmer – If it is yellow it will eventually be green.

Paul Currier – Yes, and then it will turn to blue.

Carl Paulsen – We used something similar in the Sludge Management Advisory Committee some years ago. This document gets big and bulky and cumbersome. I wonder if it would be helpful to occasionally to get a distilled version that incorporates changes we've agreed to and leaves the rest of it in this format. Does that make sense and would that be helpful? I do know that these get pretty cumbersome at some point. It's hard to track when there is one change we are going to discuss that reflects back to an area that we already decided on. It is hard not to have that language fixed.

James Fitch – What do you mean when you say it changes and goes away? My assumption is that it will become blue in the context of this document once we have reviewed it and the comments will disappear at that point, or do they stay in?

Paul Currier – In the process that we used before, they stayed in.

James Fitch – It still maintains itself as blue and doesn't just disappear and become text.

Carl Paulsen – This is just our working stuff anyway and we are not saying it is approved.

Paul Currier – If there is active discussion there can be too many comments and you have trouble getting to the rule language because there are too many comments.
Carl Paulsen – Is there anything else because Paul wanted to speak on the draft Surface Water Assessment?

2:05 – 2:15 Draft Surface Water Assessment 2008

This is just to let you know that it is on the streets and we are looking for comments and to let you know how you can comment. What is out for comments officially is the 303(d) list, which is the list of impaired waters that need a TMDL. The entire assessment is out there and can be viewed including all the surface waters that we have cataloged from New Hampshire. It is out in two forms. There is a PDF of the 303(d) impaired waters and an Excel file that can be downloaded. If you want to play with it that is the more versatile version. That is just a spread sheet that just has assessment results and assessment unit identification numbers that don't mean a whole lot to you unless you know how to find a waterbody that you care about and identify its assessment unit number. The easiest way to do that is to go the web report of our 2004 Assessment. There is a GIS tool that was developed by our OIT folks to do that. There is a web link here and if anybody has trouble finding it there is a web link that will take you to a screen that looks like this. It is in ARC Explorer and it is a map of the entire state with the drainage network and the assessment units on it. You can zoom in on this and you can zoom successively until you get to the location you want and you should be able to see the drainage unit and the assessment unit that you are interested in. For example, this is zoomed into Concord. Once you zoom in you can use the information tool to click in on any waterbody whether it is a river segment or a lake. This is from the 2004 Report but it will give you the assessment ID's. We haven't changed ID's since 2004. The assessment data may change. The red ones here were impaired in 2004. Most of those are still red but it is not necessarily the same. If you want to go to the Excel spreadsheet that is the assessment unit number down there. That identifies it as a lake and it's coded by hydrologic unit code, in which it exists. This is the assessment results for the six designated uses and tells the status. Little Turkey Pond is impaired for exotics and mercury.
Carl Paulsen – Can you go over the coding of each segment again? It is the HUC 10 code?
Paul Currier – HUC 12, I think. You will find an explanation of that in the consolidated listing and assessment methodology. I have not looked, but I think that the current 2008 one is up there and you can take a look at it on the web and it is easier to find. That gives a description of how we code those.
Carl Paulsen – I was wondering if there was a single list of the HUC 12's with the name of the watershed. Anyone who got the Excel file could sort easily and go and find their waterbody.
Paul Currier – You can sort and filter it either by hydrologic unit code or by eight digits and you can get just the watersheds that you care about. Ken Edwardson is our guru on this and if you have a question he can how you either how to use the spreadsheet or send you the analysis that you need.
Allan Palmer – Is there a summary of changes from previous report?
Paul Currier – There isn't. We don't have anything that would do that quickly.
Allen Palmer – How much for changes from report to report?
Paul Currier – We have added six hundred impaired waters. There is lot more. The big change is that we have a mercury TMDL that has been approved by EPA. There is a classification scheme that EPA puts out that basically says whether a water is fully supporting, non-supporting and needs a TMDL that hasn't been done yet, non-supporting and doesn't need a TMDL for some reason, or non-supporting and the TMDL has already been done. We have moved all the five thousand plus assessment units for mercury into the TMDL is done category.
Carl Paulsen – Is there anything else?

Malcolm Butler – Isn't there a list on the website of some of the waterbodies that were removed from list?
Paul Currier– EPA tracks that and basically we have to justify a removal. There haven't been very many removals.
Donna Hanscom – When is the date for the comments due?
Paul Currier – I believe it is March 23rd.
Carl Paulsen – Is there anything else? I think we can move on to the NH Lakes Association comment letter and the next meeting topics.

2:05 – 2:15 NH Lakes Comment Letter and Next Meeting Topics Paul Currier

I think that their letter sets the stage for the next Advisory Committee meeting. This is the task list and tentative schedule that you saw at the last meeting and that schedule had us, at the April meeting, talking about anti-degradation, high quality waters and assimilative capacity. If you recall there was considerable work on that prior to 2006. Many of the NH Lakes comments deal with issues related to that work that was in progress in 2006. The Lakes Nutrient Criteria Subcommittee was working on those issues. What we propose to do is meet with that Subcommittee between now and April and restart this discussion with a report.
Carl Paulsen – do you need something from us to get started with that?
Paul Currier - I don't think so. As long as everybody is ok and that is what we are going to do. I think that we are on track and the NH Lakes comments are timely and pertinent to the discussions that we need to have in April.
Vern Lang – Is there any kind of summary on these discussions? As I recall they started around 2003 or 2004 in the last go-around and I lost track.
Paul Currier – That is a good suggestion, sort of what Bob did for the nutrients with a boiled down history of what has been done before. As Jim mentioned we will try to get that out somewhat in advance of the next meeting.
Allan Palmer – The letter speaks of a concentration of 10 ppb and I see now that the phosphorus number 8 ppb came up discussing Lake Champlain.
Paul Currier – Lets save those discussions.
Allan Palmer – I think we are going to talk about that next with phosphorus nutrient. There is a 10 in here now, right?
Paul Currier – The short answer is not much.
Carl Paulsen – It seems that a good portion of the letter refers to the antidegradation discussion. Is that going to be this workgroup?
Paul Currier – The Lakes Nutrient Subcommittee was discussing antidegradation and had determined that antidegradation was the more important issue for most New Hampshire lakes. The issue was not whether they were impaired or not, the issue is identifying them as high quality waters, or Tier 2 waters, and putting mechanisms in place so that the anti-degradation process works as described in the federal rule. There needs to be a social and political decision in order to allow degradation.
Carl Paulsen – If you want to be engaged in the discussion on antidegradation, will there be that discussion continued in the bigger group, or is that something that you need to be involved in this workgroup to get?
Paul Currier – The April topic for the bigger group is anti-degradation, high quality Tier 2 water and assimilative capacity, which is a lot of what the NH Lakes letter talks about. The idea is that the Lakes Nutrient Workgroup will pick up where we left off, do sufficient work to frame the issue and bring it to the whole Committee. You won't lose out if you don't get involved in the Subcommittee.

Allan Palmer – That is a good point. For instance, the assimilative capacity 10% number, I'm assuming that the subgroup will be talking about that in the context of the nutrient criteria, but not in the greater scope of assimilative capacity for all pollutants. Is that a safe assumption?
Paul Currier – We presented to this committee the concepts for identifying assimilative capacity for whatever parameter you choose. We are going through examples. One of them was Perkins Pond for phosphorus. That is where we stopped. The idea was to produce some additional examples so people could understand it and to further work over the Perkins Pond example. That would be done in Subcommittee because that issue is in the NH Lakes comments. Then it would be brought to the whole Committee.
Allan Palmer – Could you be changing the way that assimilative capacity is applied across the board through this Subcommittee?
Paul Currier – No, not in the Subcommittee. The terms of reference are that DES proposes something for discussion and the committee works it over and assigns workgroups so the committee as a whole doesn't have to do all the work. The Committee discusses it and tries to make a recommendation as a committee. If not, you can have a minority report if you want to and then DES responds. If DES takes action we may not take the recommendations of the Committee. If we don't, then we will inform you of that in written communication to the Committee.
Allan Palmer – Could the Subcommittee come back to the Committee and propose a new nutrient regulation? In doing it we have totally revamped how assimilative capacity is now looked at. This new approach will also be used to calculate assimilative capacity if you are dealing with toxics or any other pollutant.
Paul Currier – Assimilative capacity specifically applies to any type of pollutant.
Carl Paulsen – It wouldn't be without the full Committee's blessing.
Allan Palmer – I am not greatly interested in nutrients in lakes but I guess I may get involved if I think it would have broader repercussions.
Carl Paulsen – If you want to get in on the ground floor of that discussion do you need to be part of that workgroup?
Paul Currier – I believe there is an example already out there in the meeting records for toxics. Toxics are easy. The best condition is zero. You have the standard and you subtract zero from the standard and you have your assimilative capacity.
James Fitch – Just to clarify, the Subcommittee itself doesn't make decisions that bypass this Committee at this level. If you want to be involved in the early on discussions and actively involved in the proposal that comes to this Committee you have go to those Subcommittee levels.
Paul Currier – Another example of that is the Estuary Nutrient Subcommittee, which is the NH Estuaries Project Technical Advisory Committee. They have continued to work and when they have a work product to report it will come to this Committee.
Carl Paulsen – Are there any other questions or comments?
Donna Hanscom – Do we have a copy of the study that is referred to in here that is needed to determine the preliminary total phosphorus criteria?
Jim Fitch - Are you asking about the Perkins Pond Study?
Vern Lang – I think she is referring to Phil Trowbridge's analysis of the DES data.
Paul Currier – Where are we, the NH Lakes letter?
Carl Paulsen – The NH Lakes letter.
Paul Currier - I believe that is in the record of previous meetings but we can circulate it. I think that a lot of these questions should be answered by the prep work in Subcommittee.
Bill Daley – I was curious if the Subcommittee have minutes, agendas and information to put on the web.
Paul Currier – It is looser than this Committee is.
Carl Paulsen – I wonder if, at the very least for that reason, we ought to make sure that everyone gets every announcement of the meetings as early as possible so that everyone can

attend if they want to and everyone is well informed about it. Is there another suggestion as to how we might do it?
Paul Currier – Bob, would you make sure that happens?
Bob Estabrook – I think we did that before
Paul Currier – I think everyone is getting notices of the Technical Advisory Committee for the Estuary Project.
Allan Palmer – I am.
James Fitch – I am because I am on it.
Paul Currier – Does everybody want notices of that too? Make sure that happens, Bob. **Carl Paulsen** – Anything else on the nutrient group and the anti-degradation discussion? I think we can move on to the discussion of the Nutrient Rule changes.

2:25 – 2:50 Discussion of Proposed Nutrient Rule Changes Bob Estabrook

One of the documents we sent out was called "Discussion of Proposed Changes to Env-Wq 1703.14 Nutrients. We began discussing that in 2003 and we worked on it for two or three years and then we set it aside. The Nutrient Rule, as currently written, does not allow for water transfers and there are legitimate reasons that we would like to allow water transfers, specifically a transfer to Class A waters to supplement public water supply. Now the nutrient criteria say Class A waters shall contain no phosphorus unless naturally occurring and clearly a water transfer is not a natural occurrence. We also have paragraph D that says there shall be no new or increased discharge of phosphorus into lakes and ponds. If you are transferring water, any surface water will have some amount of phosphorus so it would violate that criteria. This discussion paper goes through the various iterations we did trying different language. One of the comments was that it seemed that we were weakening our nutrient rules just to allow transfers and so we said that, except for transfers, such and such could happen and that was not legal because it was creating a new classification. We couldn't do that. We also went through a process where "no new discharge of phosphorus" became "no new or increased point discharge of treated or untreated industrial waste or sewage". The idea was that we don't want a sewage treatment plant built on the side of a lake and discharging into a lake. The entry dated 10/26/2004 is what we had ended up with as of that date and we had put it aside to address anti-degradation. We still have the issue of "unless naturally occurring" and based on the schedule that Paul had up on the board a minute ago, that is something we are going to be discussing at the next meeting. We still have the issue of no new or increased discharge of phosphorus into lakes. If you look on the last page you will see changes we are proposing for discussion today. Paragraph (a) "unless naturally occurring" is staying for now, but we will be discussing that at a future meeting. We are now talking about discharges that contain phosphorus or nitrogen and encourage cultural eutrophication. If you look above that you will see paragraph (e). We had proposed to delete that because we couldn't specifically define "contribute to culturally eutrophication". Tony Zuena, who represents Salem, which wants to transfer into Canobie Lake, had said truthfully that any iota of phosphorus contributes to cultural eutrophication. You could argue that any increase would contribute and therefore if we kept that language we would not be able to allow for water transfers. The problem that some of us lake biologists had is that if we deleted it we could no longer enforce complaints. We often get complaint calls. For example, if we get a call about some hobby farm piling manure next to a lake, we take a sample and want to show that the runoff from that area is causing a violation of water quality standards. To do that we have to have some language in there that allows us to say a violation has occurred, and, to do that, we are proposing paragraph (1) under (c). What we are saying in (c) is "discharges containing phosphorus or nitrogen that encourage culturally eutrophication shall be treated to remove the phosphorus or nitrogen". In paragraph (c) we are saying that a discharge that is 10 ppb above the mean in the lake contributes to cultural eutrophication and therefore is a violation of the criteria. You would go out during a rain event and sample the phosphorus value

of the lake and you would sample what is running of from the manure pile and if it was 10 ppb or greater than what was in the lake, it is a violation. We also have language of 100 ppb for discharges into flowing water. That would allow a sewage treatment plant to discharge into a river but not create more than 100 ppb above what is in the river itself. In part (d) we said no discharge to lakes, ponds and tributaries and we changed tributaries to surface waters. In some cases you can have a discharge that goes into a wetland and then goes into a lake and it may not be a tributary stream so we changed it to surface waters. That is a lot to think about and we are open for discussion and written comments at this meeting and afterwards, and we will have a new draft rule at some future meeting based on comments received.

Carl Paulsen – Are there any questions or comments?

Vern Lang – The first question I have has to do with (c) (1) where you came up with 10 ug/L. The first thought I had is that you didn't have any upper limit as far as loading, pounds per day, or however you describe it. It would be one thing if you had someone throwing a glass of water into the lake that had only 10 ug/L threshold, versus a discharge of a 100,000 gallons or 3 million gallons per day going into the waterbody. Just the concentration, in and of itself, didn't seem to throw much of a cap on it. The other, deeper thought that I had regarding this issue has to do with the fact that even if you were allowing a discharge with the same concentration as the water in the lake it would seem like you are still adding phosphorus to the lake. Phosphorus, having the ability to recycle in the waterbody, could be difficult to remove. Even if you are just adding water to the lake with phosphorus of the same concentration as the lake it could be converted into algae, which would die and go into the sediment and continue to be recycled with the one-sided approach of putting a limit on what you discharge to the lake. You have to look at the other side as well. How do you get rid of it? Is there an outlet from the lake or is there some intake from the lake that is sucking in phosphorus so you have some ability to maintain the phosphorus natural loading to the lake. It is probably more difficult to put into practice than discussed here.

Paul Currier – There are three aspects here, one is obeying the water quality standard that is related to phosphorus. EPA says that nutrient standards should have a measure for phosphorus, nitrogen, clarity and chlorophyll. There is a standard that we are attempting to quantify numerically and there is antidegradation, which says unless there is a good social and economic reason there shouldn't be any degradation of the waterbody. What Vern described would be degradation. There is phosphorus coming into the waterbody that causes an increase in chlorophyll a and biological activity and that is degradation. There are these words that have been in the rules forever, which say for lakes there shall be no discharges that encourage cultural eutrophication. That is another threshold separate from antidegradation and the standard that we are trying to quantify sufficiently in the rules so we can apply it in a particular situation. In this case, as Bob described, we would be able to apply the 10 ug/L to a particular situation, like it is raining out and you have a little manure pile with a little stream running from it. We know what the mean concentration is in the lake because the VLAP folks have been out there measuring it and we can take a sample and say that they are causing cultural eutrophication because it is greater than what is in the lake and you have to stop. The same idea is true for flowing waters. That is the kind of situation where we would apply cultural eutrophication quantitative definition by practice.

James Fitch – Part of my comments and questions have to do with that variation that you brought up. There are other criteria we are looking at also but I am concerned that they aren't captured in these words. I don't know which takes precedence. The example in (c) (1), if I read that without knowledge of the other things, there is nothing there that tells me that couldn't be a naturally occurring body of water that is in non-compliance with any one of those standards that you just mentioned and this would allow a discharge to it that exceeded the concentration that is there, meaning the concentration in the lake could already exceed, naturally, any one of those criteria and, as written here, there is no reference to that and I don't know how to get around that. It is just one of the things that I picked up on. If it is just a concentration basis, it is a

relative comparison to what the bulk liquid has in it. To address the other part of Vern's comments, I'm not a lakes guy so if I make a stupid comment, that comparison to the concentration in the discharge from the lake might be a more appropriate way, assuming that constant over the period of a year, meaning the micrograms of phosphorus in the discharge to the lake is actually bad for the environment and to create a threshold in that basis, which might be equivalent or less than the concentration to the lake, or it might be less than, if the theory of capture within the lake worked. I am just throwing that out as an idea. The other thing we are not capturing is the antidegradation and those limitations within this part of the rule.
Paul Currier – That is absolutely right.
James Fitch - In (c) we talk about the encouragement of cultural eutrophication and I think it depends on the definition of encouragement and I recognize you are trying to define that and I think it could be more explicit. You could certainly suggest that any addition is an encouragement. It also raises a question between the use of impairment in (b) and encouragement in (c). I recognize impairment has a definition that compares to a standard, a number if you will, but to maybe put a reference there as to what impairment means. Maybe it is already there in the rule elsewhere. I am trying to look at the difference that someone might read between (b), where it says I can't impair, and in (c), where it says I can't encourage. We then structured (c) (1) and (c) (2) to define what encouragement means but impairment isn't referenced.
Allan Palmer – It isn't defined either.
Paul Currier – Those words I find somewhat bothersome. They have been in there a long time and they occur somewhere else in the standards. That is somewhat circular. The standards are intended to define, quantitatively, what constitutes impairment. We assess waterbodies against the standards. It is circular to say if we have a phosphorus concentration that impairs the use then it doesn't meet standards.
James Fitch – I guess that what I am suggesting for discussion is the impairment caused by phosphorus might be DO. It might be visual acuity and those are defined elsewhere in the document. I am simply suggesting that you reference that section with impairment to define what impairment means, without any question or confusion. What is an impairment or encouragement? I am concerned that by using lake or pond as the reference that I don't know when a lake or stream becomes an impoundment under current definition but it concerns me very much that there are a lot of impoundments in the state that are simply there because of historical use of the hydropower capability. If those are defined as lakes and ponds then this becomes quite restrictive to a lot of uses. I think those are the locations where we will see a lot of DO-driven impairments, and/or clarity-driven impairments. I like to understand how impoundments fit into this whole discussion. I am a little concerned with part (c) (2) that we are defining a concentration that we consider to be acceptable in a waterbody that is flowing and that is just a blanket value for all situations. Anything above this is good and anything below this is bad. It is a threshold that has nothing to do with the specifics or unique characteristics of that waterbody. There is no allowance here for this to be a threshold that is in place in absence of a TMDL. This doesn't allow a discharge or, under (d), an increase or change in that discharge. That changes that concentration. It appears to say that if I am a growing community that needs to increase my discharge, number one, is it an increase based on the concern being nutrients or is an increase based on flow, pounds of BOD, TSS, or some other constituent that doesn't relate to this situation. Could I remove a non-point source of nutrients as a technique to allow growth and development of the community? I could improve a naturally occurring source from this waterbody so the facility or the community could grow and develop and use that assimilative capacity that was removed, which was the heart of the TMDL process as I understand it?
Bill Schroeder – Are you saying that the language here doesn't permit or allow you to benefit from that?

James Fitch – Not as I see that. It doesn't allow me to develop a TMDL to allow me to show what the real situation is and the fact that the water has the capability to support greater concentrations than 100 ug/L and without any degradation whatever. It doesn't allow me to do an improvement project in an area where there may be historic sediment distribution because of past development that now is "natural" that could be contained or controlled in some fashion. When we are talking about water transfers, this isn't so much an issue now but it helps us open our minds and prepare regulations for the future. Right now we are talking about water transfers from one surface water to another, but water is transferred everyday between the groundwater table and our surface water. It won't be very long, probably in our lifetime, when we will be treating wastewaters to a point where they are potable and at that point is that going to be considered a water transfer rather than a permitted discharge taking assimilative capacity? Actually out west there are a number of situations where the streams would not function as a water-based ecosystem without the discharge from the wastewater facilities there; there would be no water during the drought period and no ecosystem during the drought period. That is something to think about as we regulate and try to improve the nutrient situation, the nutrient additions are going to be coming from other media than from permitted discharges. They are going to be from the air, groundwater and non-point sources and impairment could still exist because of our activities, whether they be from how we dispose of our waste, manage our land masses or whatever. At this point in time we are in the mindset because we have regulated discharges and that is the easy place to address but we have to remember that all these other ones are out there at the same time. Phosphorus may not be an issue in groundwater but nitrogen will be because it is a conservative compound and it isn't removed in the ground.
Paul Currier – Those are good points. In our internal discussions the words cultural eutrophication have always been focused on lakes.
James Fitch – Please define lake for me in the context of impoundment.
Paul Currier – I will get to that. We attempted to say let's cover the flowing waters as well and perhaps we should not try to do that and should limit the idea of cultural eutrophication just to lakes and ponds. We have in progress, it has not been published yet as part of our waterbody catalog development, fairly concise definitions for the different waterbody types and they distinguish between lakes and ponds and including lakes raised by a dam and impoundments, which are essentially riverine situations which impoundments have been created by the construction of dams. Right now the way our wetland waterbody catalog is we are not consistent but in the next version of the catalog we will be consistent and impoundments will be defined differently than lake.
James Fitch – That would address it assuming that there were criteria for lakes that were different from the criteria for impoundments. Because an impoundment can act similar to a lake, if it acts like a lake within a riverine system then any addition to it which is a natural phenomenon in a natural moving system, potentially could be degrading that water body. Are there different criteria of acceptability to water quality within an impoundment in opposition to water quality within a lake?
Paul Currier – The idea would be that water quality criteria would be different for the various water body types. We are just beginning to tackle this with regards to wetlands.
James Fitch – My reason for bringing it up is that I am seeing in Region 1, and other regions in the country, that water quality compliance behind impoundments is driving a lot of nutrient work that I question the value of in the long run. There is a lot of expense, not only in capital but in the operations and disposal costs associated with those treatment residues and bringing the chemicals to site. Because we are blind and are looking at them as lakes with the same sets of criteria we are putting in place a lot of things that I'm afraid we might not really need or want to put in place.
Carl Paulsen – Are there any other thoughts on this?
Vern Lang – To go back where I left off on (c) (1), looking at Vermont standards on Lake Champlain where they have a similar problem with phosphorus in all sections of the lake but the

main lake is a real problem and for the criteria for streams that discharge into the lake has a threshold value of .001 mg/L. It is thousandths of milligrams per liter as a discharge criterion. It strikes me that was one of the attempts to deal with the existing loading of phosphorus. In lake sediments in Lake Champlain you have clays and this continual cycling of phosphorus. On (c) (2), when I look at that, 100 micrograms per liter, one of the questions that came to mind, in addition to this issue with reservoirs and impoundments, is that if you had a stream and it had a loading or instream concentration of 20 micrograms per liter why would you want to allow it to automatically go to 100. There doesn't seem to be any mechanism here to limit it. Limiting phosphorus loading would be unnecessary. I am assuming that these numbers were just picked for discussion purposes.

Paul Currier – Yes. The 100 ug/L instream is a literature value and it has been used by Region 1. Donna in Keene is looking at a draft permit for the Keene plant that has that in it.

Donna Hanscom – I would like to address the 100 ug/L but I was looking for a chance. It was my understanding the 100 micrograms per liter that EPA is using as a water quality criteria, when we went back and looked at the initial cite, the 1960-something publication talking about nuisance taste and odors in drinking water, it didn't look like it was talking about anything that would have to do with uses of a river or uses of any sort of surface water for anything other than potable water supply. I wonder if anyone has looked at that. If you want I can send you a copy of that article.

Paul Currier – I think we would be interested. I know in the guidance nutrient criteria development for rivers there are a bunch of literature cites. I thought one had 100 ug and there were some that had less than that.

James Fitch – I can comment on that because I am familiar with that. There was a region-wide study completed but not from the 60's. My recollection was that it was the 90's that looked at concentrations of phosphorus throughout the region in unimpaired waterbodies. Unimpaired in general, I don't know how they defined that. They found that 100 ug/L liter concentration instream, in the context of their data, below 100 seemed good in all situations. That meant the water quality in the impoundment, the streams and downstream versus above the impoundment. That was adopted and I do think that is, as you said, one of the higher numbers but I think it had more real data behind it than any of the other studies.

Donna Hanscom – I think when EPA cited that number in Keene's spec sheet they went back and referred to a 1974 document that referred, ultimately, back to this 1968 document. I would be happy to supply that for the next meeting.

James Fitch – I will also go back and find that reference that I'm familiar with.

Vern Lang – What I think you are looking for there is the ENSR Study that was done in the nineties. It was a data screening process.

Paul Currier – It was not that long ago. That carried over into this century. Donna, if you send them along I can distribute them.

Donna Hanscom – Ok.

Allan Palmer – I am hearing that in addition to this, there will ultimately be numeric criteria for nitrogen and there will be some sort of clarity standard and chlorophyll a standard? Is that the ultimate plan?

Paul Currier – Yes.

Allan Palmer – Is all that going to be done prior to next set of proposed rules that we are going to come up with?

Paul Currier – No.

Allan Palmer – No, those are not necessary to continue to push this on because they seem to go hand and glove. It seems like you wanted it all to come together at the same time but I can understand the complexity, confusion and the trouble that will bring on.

Paul Currier – The attempt in these words is to retain the words "cultural eutrophication" in the rule and put sufficient definition so that the rule can be applied by regulators in a particular situation where we are determining whether or not there is a discharge of phosphorus that

encourages cultural eutrophication. That is independent of applying antidegradation policy to a particular situation or determining impairment for nutrients or nutrient caused effects in a particular situation.
Allan Palmer – For our short-term goals that we have here we don't need those numeric criteria for those specific pollutants?
Paul Currier – That is correct. The reason is to do away with water transfers, which are effectively prohibited in all circumstances, to lakes and ponds.
Allan Palmer – To encourage that I would say take out number two and just stick with lakes and ponds to continue this thing moving forward because I think that brings in another mess that you don't want to deal with short-term.
Paul Currier – I think Jim has already made that point. Is there sense from anybody else on that? I think that would work
Carl Paulsen – I want to think about that a little bit more.
Paul Currier – We would basically limit the concept of cultural eutrophication to lakes and ponds.
Carl Paulsen – Which is where it has always been, right?
James Fitch – Clarify that impoundments are not lakes and ponds.
Paul Currier – That means that we would need to move forward with those definitions and get them into practice.
Neil Cheseldine – Maybe to help it along, would it help to have someone do a data analysis of what you have in place to see the impacts of the number two item, dilution factors of plants, an instream standard of phosphorus and what the typical effluent phosphorus have been to see how many plants have been impacted and would have to be put in for phosphorus removal?
Paul Currier – My sense is that this would involve the mean phosphorus concentration and not a 7Q10 concentration.
Neil Cheseldine – You are not using it in the same sense that EPA has used it in the permitting?
Paul Currier – That is right but if we do away with that concept we don't have to worry about it.
James Fitch –I think there is very little data available at those discharge points. I tried to find it and can't find it.
Paul Currier – Whereas, in a lot of lakes, we do have sufficient data to get a mean. Lake data is usually taken at the deep spot and usually the lake is stratified into the upper and lower layer and that (the deep spot) is considered to be representative (of the entire lake).
William Schroeder – I would like to return to Vern's first comment, which is there is no volume mentioned here and it seems that is a very important thing. You gave an example of someone having a pile of horse manure near a lake. Having this definition, you would be able to go out and measure the stream coming out of this thing but if it was a small pile in a big lake it is not going to make too much difference. If it is a big pile in a small lake, then it would. Volume needs to get in there somehow or it seems like it is missing the point. I understand the idea of trying to quantify cultural eutrophication but it seems like it is not enough somehow.
Carl Paulsen – I guess I share that concern. If there is a manure pile, depending on its location, could you treat it as a discharge because that is what the language calls it? I know in some cases that could be treated as a discharge. If every property owner had the right to have a manure pile that discharged that much around the lake individually, then as a cumulative event that could be significant. I think there is value in this approach but there are also weaknesses.
Paul Currier – The idea isn't an upper limit in aggregate but you could apply this. If you take a cup of water, with 10 ug/L per liter of phosphorus greater than the lake and you dump it in the lake, is that a violation? I think the answer is yes under these words. First of all, the discharge is the stormwater that results from rainwater hitting the manure pile and getting into a channel you can sample. The way this would be applied would be to sample the runoff from manure pile during a rain event and the results of that would be an analytical result which says that

phosphorus concentration is X. You would compare X to the mean phosphorus concentration in the lake and determine compliance.
Phil Bilodeau – Let's try to bring the thought process to something that is a little more realistic than a pile of manure or something that is going to have nutrients associated with it and look at in the context of developed land or roadway systems around the lake. It is the same idea but it brings it to a more reasonable situation that we might see. This goes from the big, small, developed and undeveloped watershed. If a small pond has stormwater discharges from roads and lawns around it and they are all 10 ug/L per liter or less, are those acceptable? When do you have too many that are 10 ug/L or above? That is where you get to the volume component and it is a little more critical. I don't know if this is part of a rule that helps to get us towards that kind of control or not.
Paul Currier – I think we would deal with that situation by applying the antidegradation policy or the water quality standards. There is some effect that is acceptable as far as the standards go. You have chlorophyll a in excess of the criteria for that, or when we have a clarity criteria developed, or we have an increasing trend in phosphorus concentration in the lake and that constitutes degradation and someone will have to change something (to correct an impairment).
Bill Daley – In defense of the current language, I think you need some numerical value which you could make progress on in antidegradation. That 100 number has some historical value in the past and I would be opposed to seeing that taken out of there or otherwise revised.
Carl Paulsen – Do we have any other key issues? I don't want to get too far behind on the schedule and it seems like we need to come back with some more revision at the very least.
Phil Bilodeau – I am going to change the focus of the conversation entirely from the scientific to the practical. I am thrilled to see evolution from (Env-Ws) 1703 as it went through and realized and recognized existing transfers. It would be a shame to have it lost because of some legality. What I am reading here now recognizes transfers take place. I am not seeing how this recognizes those actual transfers taking place.
Paul Currier – No, it doesn't.
Phil Bilodeau – You can't make the exception legally, as in (Env-Ws) 1703? You can't write that?
Vern Lang – Right.
Phil Bilodeau – Why would I, as an existing transfer, be comfortable with this?
Paul Currier – Because the prohibition, which is in the current rule, way at the top here, which says "there shall be no new or increased discharge of phosphorus to lakes or ponds", period. Those words are there, and we had talked about taking (e) out completely and eliminating the words, cultural eutrophication. Folks didn't want to do that.
Carl Paulsen – Can we just charge you with another version then that we can discuss unless somebody has something burning they want to discuss?
Allan Palmer – The concentration relative to phosphorus in Arlington versus Canobie?
Paul Currier – It is a little greater in Arlington but not much. The main issue for that transfer would the loading rather than the concentration.
Allan Palmer – That gets back to our volume discussion.
Paul Currier – That will be a subject of future meetings.
Allan Palmer – If you had a lake with 50 ppb phosphorus in it?
Paul Currier – It would be very green.
Allan Palmer – That shows how little I know about it. What if you have a lake that has 20 ppb?
Paul Currier – If you do the relationship between chlorophyll and phosphorus, you get about 20 micrograms. 20 micrograms of phosphorus produces a chlorophyll concentration, statistically, that is 15. That is our interim standard.
Allan Palmer – So what do you need for a phosphorus concentration to maintain a healthy lake?
Paul Currier – Single numbers.
Allan Palmer – We are talking about being able to dump plus 10 into it? The ten is significant though?

Paul Currier – Yes, for most of our lakes, especially for the clear lakes. They are in the single numbers. It is ten above whatever the mean lake concentration is so you are talking 20 to 30.
Neil Cheseldine – Do you have the data to show the 10 works for all the existing transfers?
Carl Paulsen – There is a point where we have to be realistic of the goal water quality.
Brendan Kernon – It seems that (c) is meant to be for incidental, non-permitted type discharges for staff to ask for quantitative criteria and to go out and do enforcement in lieu of more comprehensive data on that manure pile. Is that right Bob?
Bob Estabrook – It is not a continuous discharge.
Brendan Kernon – It is where staff has an issue of discharge and doesn't have time to do a three year study to determine if stormwater is draining through a manure pile into a lake. Maybe having that as a screening analysis, for an incidental discharge and in future analysis be allowed to reevaluate that with data might be an option. People are stuck on those numbers. Under nutrients there should be a category for transfers, a comprehensive analysis of what is going in and what is being pumped back out, when transfers are occurring, what is being pumped out when there are no transfers occurring. It would just be a stands-alone category that meets the objective of protecting the lake but have it in a category of transfers so we are not trying to get cute with the language to address the complexities.
Paul Currier – I think a lot of that analysis is in the antidegradation review process.
Brendan Kernon – It seems it would be cleaner to put it in here rather than rewriting the words to address the transfer scenario. Have it be repetitive and in both the antidegradation and how you would address the transfer analysis here with all the considerations that would go into it.
Allan Palmer – Can we call out transfers so blatantly in this section or will that go back to the problems we had earlier?
Paul Currier – The earlier issue is that you can't create a different ambient water quality standard, depending on the situation. You couldn't create a different water quality standard that applied to transfers as opposed to stormwater or treated sewage. The ambient standard is the ambient standard. It applies no matter who is putting what into the water.
Brendan Kernon – Right, but what I am suggesting is that you don't have different standards but you can't assess them all the same way.
Carl Paulsen – I think we ought to move on and if there are any more comments people can send them on to DES directly.
James Fitch – Does this capture where we are at this point at this time because I don't know what the next step is?
Paul Currier – The next step is to revise and come back with further language for discussion.
James Fitch – Within those revisions, where did (d) end up?
Paul Currier – We have not talked about (d) yet.
Bob Estabrook – (d) is essentially the same as it was.
Carl Paulsen – There is some discussion later on, at some future time, about the whole waste issue.
Paul Currier – That is next and last on the agenda. Whether or not (d) works at all depends on whether stormwater is sewage or waste. The current language says there shall no new discharge of phosphorus into lakes and ponds". That applies to stormwater.
James Fitch – We need a better difference. Wastewater and stormwater will contain phosphorus, and runoff from developed areas as well as undeveloped areas (will contain phosphorus).
Carl Paulsen – Why don't we go to the next item of Waste as applied to Water Quality Standards? Do we need background?

2:50 – 3:20 Revised Draft Guidance on Interpretation of Statutory Definition of Waste as Applied to Water Quality Standards Gretchen Hamel

Paul Currier – I will do a quick background. There was a fairly extensive discussion on this at the meeting on July 13, 2004. The minutes are a pretty good read and there is a discussion paper that goes along with that meeting. It hinges on the statutory definition of "other waste". To remind us what the statutes say, the statute has a definition of industrial waste, which is more or less intuitive, and it has a definition of other waste, which includes the words in blue. It says "any other substance harmful to human, animal, fish, or aquatic life". The statute also has a definition of sewage, which is more or less intuitive.
James Fitch – If we go up from the blue words, "and other substances other than sewage or industrial waste", what does that mean?
Paul Currier – That depends on interpretation. A substance can be pretty much anything.
James Fitch – If you are highlighting blue letters that indicating stormwater then those ought to be.
Paul Currier – They will be blue on the next iteration. Those words need to be interpreted in order to apply this idea of sewage or waste. The statute winds up by having a definition that says waste includes industrial waste and other waste and that leads us to the need for interpretation in order to apply both the law and our rules in practical situations that involve stormwater and transfers. This is from the discussion on July 13, 2004 that outlines the need for interpretation. Specifically, the existing statute prohibits the discharge of sewage or waste into Class A waters. That results in a problem for interpretation if you include stormwater, among other things, in that definition of other waste. Stormwater discharges do occur in Class A watersheds and our various permitting processes, including Alteration of Terrain and sometimes Surface Water Quality Certification, are designed to regulate those but not prohibit them. We have talked about (d) in our proposed rule, which to work, would depend on stormwater and transfers not being considered as sewage or waste. If they are sewage or waste then these words don't remove the prohibition for transfers to lakes or ponds. I will turn it over to Gretchen.

Gretchen Hamel - I don't know how many of you are aware of the agonies we are going through internally on this issue. The difficulty is that by trying to narrow the definition to accommodate water transfers specifically, you start to interfere with the way the agency has applied this to great benefit of surface water quality in the nearly twenty years that I have been with this agency. I had a lot of concerns about if we even wanted to go down this road. It seemed to me that there were some alternatives for dealing with water transfers that didn't require cutting, with such a fine scalpel if you will, with the words in the statute and the rules we have adopted. I think we are at agreement of whether the language that is in the statute includes stormwater runoff is a legal issue. That is not an issue that this committee can decide and we will be seeking guidance on that legal issue from our legal advisors at the Attorney General's Office. If it is determined that legally other waste does include stormwater runoff then there may be a policy issue that would be appropriate for discussion at this Committee, which is as a matter of policy, how aggressive does the agency want or should be in actively enforcing that. Also, regardless of how the opinion comes out, whether there is a need for a statutory revision so that the larger policy debate takes place where it should take place, which is the legislature. I guess that is the long way of saying I don't think this topic is right for discussion here. Certainly, if any of you have some thoughts, and we have some time, that would be good, otherwise I don't think there is a lot to discuss.
Paul Currier – The idea would be that we recognize that the issue exists and that the Department will take it to the Attorney General's for an opinion and bring that result back to the Committee.
James Fitch – Going back to the previous because I feel a need to. If that is an uncertain definition at this point in time, can we be comfortable moving forward with these changes to (d)? If your intent is to eliminate the potential for discharges of sewage and not put the other waste in it until we know what is included as "other waste".

Paul Currier – I think that would work. It is clear to me that the law includes sewage. It has been applied that way. We will work around it until we get some further definition from the Attorney General.
Carl Paulsen – If a basic approach has to be revamped significantly because of what comes back from legal council, is it worth spending time trying to work on this until it comes back? If it comes back and we need to rethink the whole approach, why bother spending time on it.
Paul Currier – I have talked about this with various people and most were of the opinion that it would be a stretch to include water transfers in the definition of waste. It is quite unlikely that the legal advice we get is going to tell us that transfers of ambient water from one waterbody to another, are transfers of waste. My thought would be that we proceed with the supposition that transfers are not discharges of waste. The issue revolves more around stormwater, but that is not an issue for transfers and we can proceed with the discussions of rules relative to transfers on that basis.
Carl Paulsen – I ask it only because it seems part of the reason there is trouble is not just the transfers question but the stormwater question and until all of them are resolved together it is hard for me to parse out the different pieces and see around it. I do not have a good enough grasp of the issues.
Paul – I think, going back to table, that the issues we need to deal with in order to deal with transfers are the issues of what constitutes "naturally occurs" and changing the words for nutrients so that discharges of phosphorus are not prohibited into lakes and ponds, regardless of their source. Resolving the guidance, by which the antidegradation rule is implemented for particular parameters. I don't think we need to hold those in abeyance. I think we can keep on going.
Carl Paulsen – Is there anything else? I think at this point we are done with the agenda, with the exception of other business.
Jim Fitch – Where are we with (d)? Are we saying that (d) seems to be acceptable as proposed?
Paul Currier – No, I think (d) is not acceptable as proposed.
Jim Fitch – If you take out the words "or waste"?
Paul Currier – That is what Jim has proposed.
Jim Fitch – The reason I say that is that I don't know the definition of sewage but if there were a discharge that didn't have nitrogen, phosphorus, or cooling water, something like that, then maybe it is acceptable.
Bill Schroeder – I am concerned about doing that until we know what we mean by waste or define waste better. We are moving from something where we said there should be no new or increased discharge of phosphorus into lakes and ponds and loosening that up to there should be no new or increased discharge of sewage.
Jim Fitch – We're keeping "containing phosphorus or nitrogen"?
Bill Schroeder – Yes, but anything else that contains phosphorus or nitrogen is no longer prohibited, whether it is waste or stormwater. It seems to me we are losing a lot until we know what waste is.
Jim Fitch – I guess I saw it as a step forward and it is the first step to take so we know we can't have sewage, recognizing we have to identify wastes and stormwater, etc when we know more about that definition.
Paul Currier – That rule has been applied to prevent new discharges of treated sewage to lakes and ponds. You just can't do that in NH.
Jim Fitch – That has been an interpretation and this would be definitive. That is where I saw this as a benefit. I agree with you Bill, that it doesn't address the bigger picture, and I don't think we can with what we know right now.
Donna Hanscom – I have a question too. Someone earlier said, and it might have been you Jim, what if you removed another source so you could increase a particular source and not increase the total loading to that lake or pond? It doesn't allow anything like a TMDL.

Paul Currier – That is correct. As the words are written now no new or increased discharge means you can't do it even if you find a way to trade with some other source so there is no net increase.
Jim Fitch – My comment was more associated with (c) (2), which dealt with flowing waters, recognizing that impoundments and flowing waters weren't lakes and ponds. Do we have wastewater discharges to lakes and ponds in the state?
Paul Currier – I don't think we have any.
Bob Estabrook - Franklin Pierce College discharges into a wetland that is upstream of Pearly Lake and the fish hatchery at Berlin discharges to York Pond.
Paul Currier – We have some discharges to groundwater which have not been considered as discharges.
Jim Fitch – That is a whole different ball of wax as far as I am concerned.
Neil Cheseldine - Waterville Valley.
Paul Currier – There is no lake or pond, is there?
Neil Cheseldine – It is all river all the way down. Maybe it is an impoundment.
Paul Currier – I think those are the only two. The one at Pearly Lake is going away and EPA is enforcing the fish hatchery.
Donna Hanscom – I missed the answer to that question, "Do we have any wastewater discharges to those types of situations now. I lost a lot of what you said.
Paul Currier – The answer is that we have two: Franklin Pierce to a wetland that discharges to Pearly Lake and the Berlin Fish Hatchery that discharges to York Pond.
Donna Hanscom – Ok thanks.
Neil Cheseldine – I think Franklin Pierce has gone by the boards too.
Paul Currier – Yes they have.
Carl Paulsen – Is there anything else? I guess we are done, with the exception of other business and next meeting dates. Does anybody have any other business they need to bring up?
Paul Currier – E-mails and written comments are appreciated and we will be put in the record and incorporated.

3:20 – 3:30 Other Business and Confirm Next Meeting Date Carl Paulson

Neil Cheseldine – I have a question about the Committee and how it functions. It seems that we very rarely bring in examples from other states of how these same obstacles have been overcome under the same federal water standards we are trying to aspire to. Are they not applicable to the NH situation?
Paul Currier – The answer is that they are and the reason we don't do it is that we haven't done the research to find them.
Neil Cheseldine – Should we? Do you think? Have these issues been tackled? Are there transfers in jeopardy in all states?
Paul Currier - Phil is that something you could take to the Water Works Association because I think Neil is right. We don't understand enough about whether they have this kind of problem in other places and what they have done about it.
Phil Bilodeau – Yes.
Carl Paulsen – I had intentions of doing that but I didn't have time but I would say if anybody wanted to do that on their own it would be very helpful.
James Fitch – I have experience in many states and I try to bring it to bear and if I don't it is because your line of logic is usually better, is a lot better than a lot of states in most situations.
Paul Currier – My general sense is that our standards for lakes and ponds are pretty restrictive. Other states do not have those nutrient prohibitions like we do.
Carl Paulsen – I have April 22nd as the next meeting and then June 24th is the meeting after that, from 1:30 to 3:30.

Paul Currier – We should probably publish the schedule out further than that. The idea was to meet every two months on the third Tuesday of the month.
Carl Paulsen – We can leave that for the next meeting to pick out a few more dates. There is the hearing on March 14th for the housekeeping rules. That is all I have. Is there anything else?
Phil Bilodeau – Can you go to those dates again?
Carl Paulsen – April 22nd.
Phil Bilodeau - I had something on my calendar for April 8th. Did we talk about that at some point?
Paul Currier – I have the 22nd of April and the 24th of June.
Carl Paulsen – Those are next two Committee meetings. We will all hear when the first Lakes Nutrient Committee Meeting is. We don't have a date yet. Are you just going to convene it?
Paul Currier – Yes, Bob and the chair will. Is there a chair?
Bob Estabrook – Yes.
Paul Currier – Who was it, Bill Smith?
Bob Estabrook – Yes it was.

- **Carl called for a motion to adjourn, Phil brought motion to adjourn forward, Malcolm seconded, all voted in favor.**